

IN THE CLAIMS:

All claim amendments and cancellations are made without prejudice or disclaimer.  
Please amend the claims as follows:

1-48. (Canceled).

49. (Currently amended) A method for delivering a nucleic acid of interest to a mesenchymal stem cell, said method comprising:

culturing a mesenchymal stem cell *in vitro*; and

infected administering to a mesenchymal stem cell, in vitro, with a recombinant adenovirus of subgroup C, said recombinant adenovirus comprising the nucleic acid of interest and further comprising a fiber protein of a second adenovirus serotype associated therewithin the recombinant adenovirus capsid, wherein the fiber protein provides a tissue tropism for mesenchymal stem cells and the second adenovirus serotype is selected from the group consisting of serotype 16, serotype 32, serotype 35, serotype 40-S, and serotype 51; ~~and~~

~~infected the mesenchymal stem cell with the recombinant adenovirus.~~

50. (Canceled).

51. (Previously presented) The method according to claim 49, wherein said adenovirus serotype of subgroup C is adenovirus serotype 5.

52. (Previously presented) The method according to claim 49, wherein the second adenovirus serotype is serotype 16.

53. (Previously presented) The method according to claim 49, wherein the second adenovirus serotype is serotype 35.

54. (Currently amended) A method for delivering a nucleic acid of interest to a mesenchymal stem cell *in vitro*, said method comprising:

culturing the mesenchymal stem cell *in vitro*; and

administering to ~~infecting the~~ mesenchymal stem cell *in vitro* with a recombinant adenovirus of subgroup C, said recombinant adenovirus comprising a nucleic acid of interest and further comprising a fiber protein in its capsid, wherein the fiber protein comprises a knob region of a fiber protein from an adenovirus serotype ~~has a tropism for the mesenchymal stem cell and the tropism determining part of the fiber protein is selected from the group consisting of serotype 16, serotype 32, serotype 35, serotype 40-S, and serotype 51, wherein the knob region provides the recombinant adenovirus with the tropism for the mesenchymal stem cell; and~~ infecting the mesenchymal stem cell with the recombinant adenovirus.

55. (Previously presented) The method according to claim 54, wherein said adenovirus serotype of subgroup C is adenovirus serotype 5.

56. (Previously presented) The method according to claim 54, wherein the fiber protein is serotype 16.

57. (Previously presented) The method according to claim 54, wherein the fiber protein is serotype 35.

58. (Currently amended) The method according to claim 54, wherein the ~~tropism determining part of the fiber protein comprises a knob region~~ is from adenovirus serotype 35.

59. (Currently amended) The method according to claim 54, wherein the ~~tropism determining part of the fiber protein comprises a knob region~~ is from adenovirus serotype 16.

**Serial No. 10/010,645**  
**Amdt. dated November 18, 2004**  
**Reply to the Office Action of August 19, 2004**

60. (Previously presented) The method according to claim 55, wherein the fiber protein comprises a tail region of adenovirus serotype 5.

61. (Currently amended) The method according to claim 60, wherein the ~~tropism~~ ~~determining part of the fiber protein comprises a knob region~~ is from adenovirus serotype 16.